Seminar/Talk

Statistical properties of dynamical systems via induced Weak Gibbs Markov maps.

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Abstract: In [1, 2],, L. S. Young introduced induced Gibbs Markov maps. It was shown that the existence of induced Gibbs Markov maps with integrable return time implies the existence of an exact invariant absolutely continuous probability measure with respect to reference measure, and the rate of decay of correlations is related to the tail of the return time. In this talk, I will discuss how to obtain similar results under weaker assumptions, which allows the induced map not necessarily to be full branch. Additionally, we yield results concerning the Central Limit Theorem and Large Deviations.

This is a joint work with Helder Vilarinho.

References

[1] Young, L.-S. Statistical properties of dynamical systems with some hyperbolicity. Ann. of Math. (2) 147, 3 (1998), 585-650

[2] Young, L.-S. Recurrence times and rates of mixing. Israel J. Math. 110 (1999), 153-188.

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- **Data:** 10 de Outubro de 2024, 14h30min;
- **Local:** Sala de Reuniões, Departamento de Matemática, UBI.

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